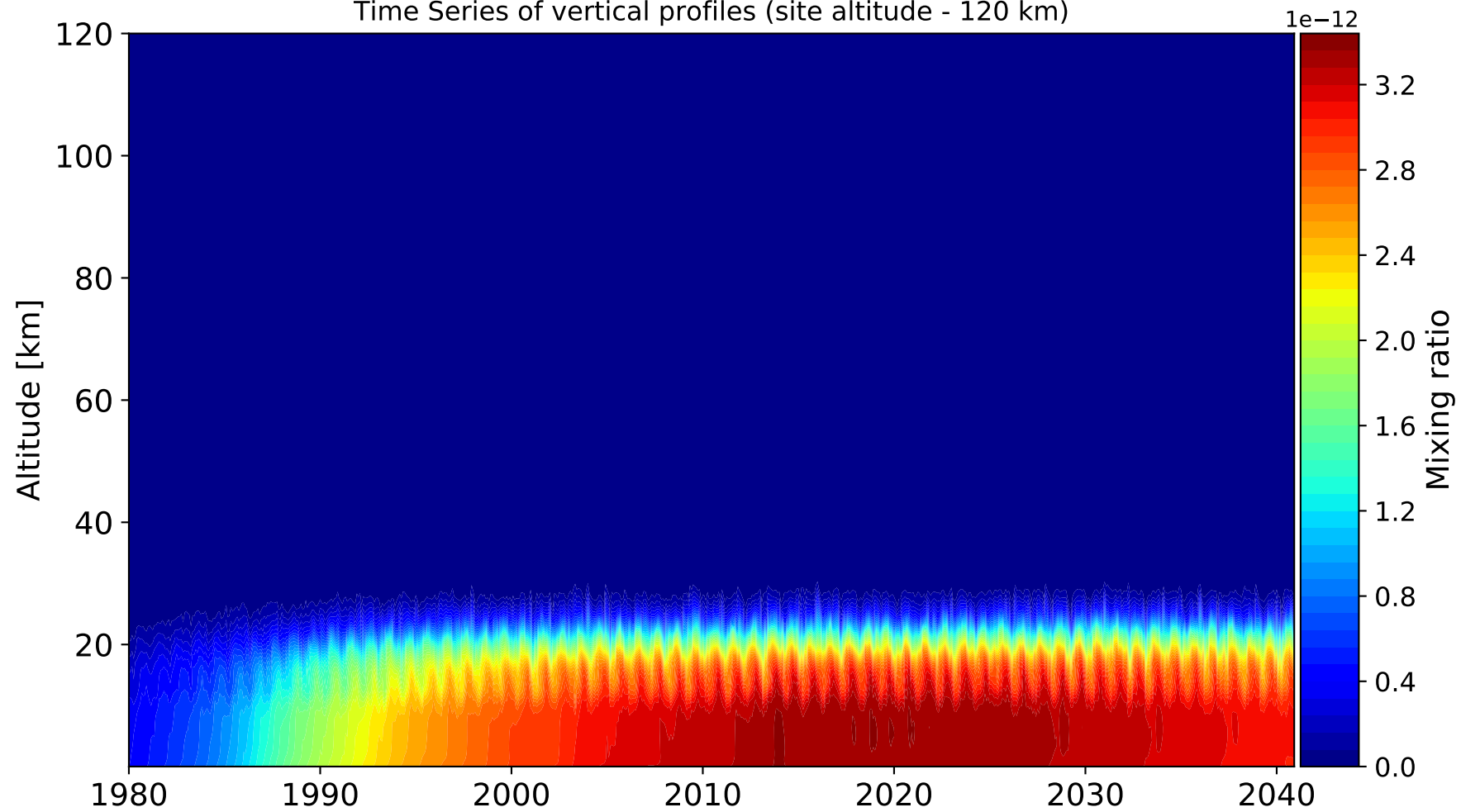
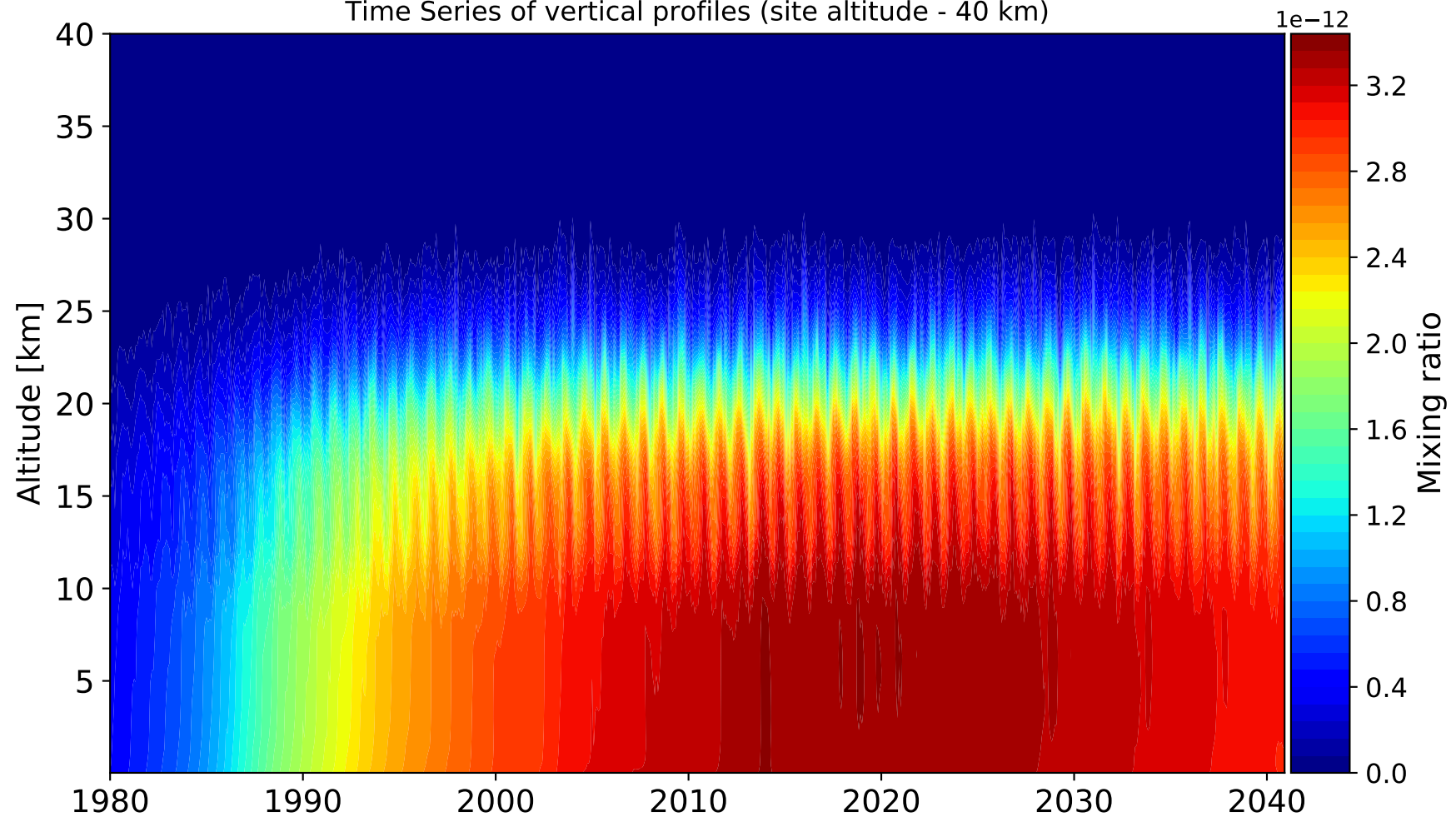


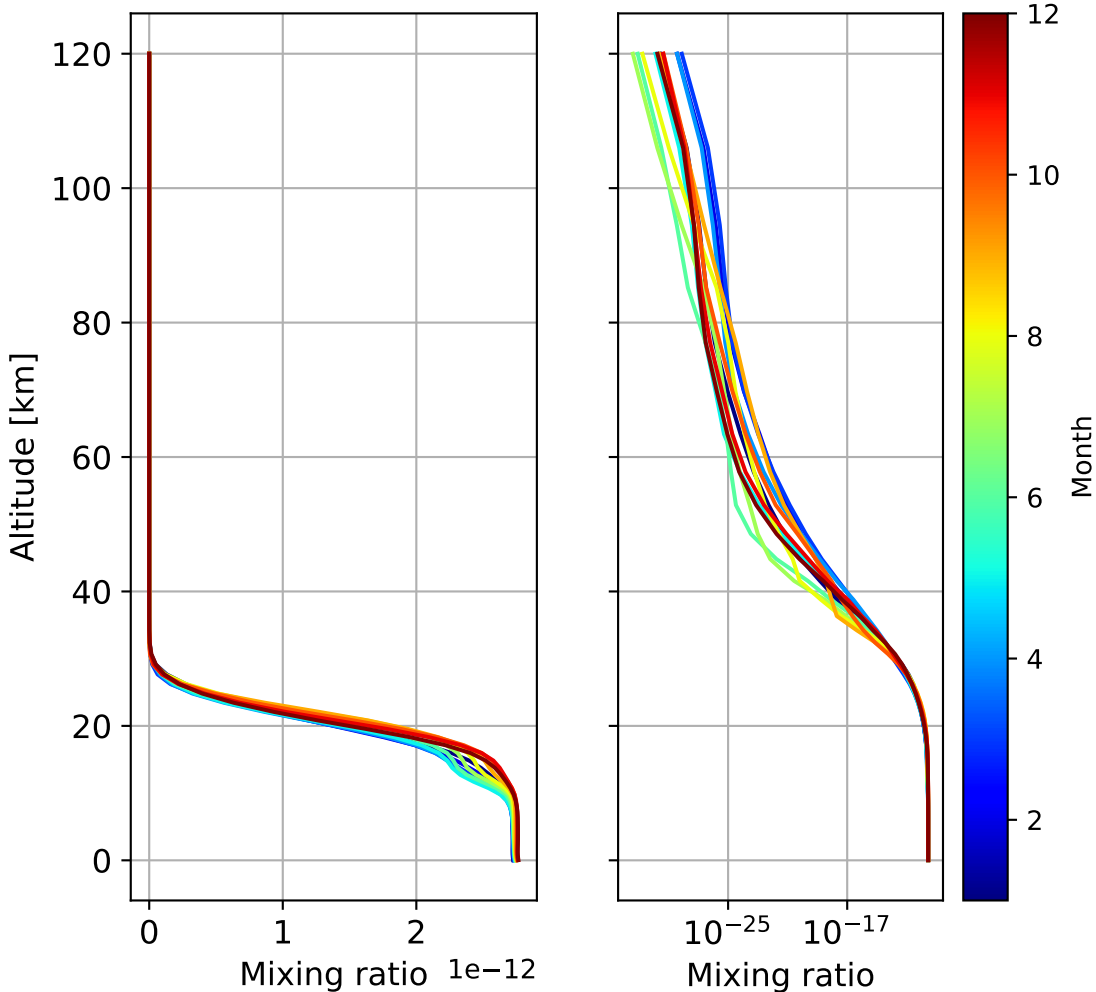
Time Series of vertical profiles (site altitude - 120 km)



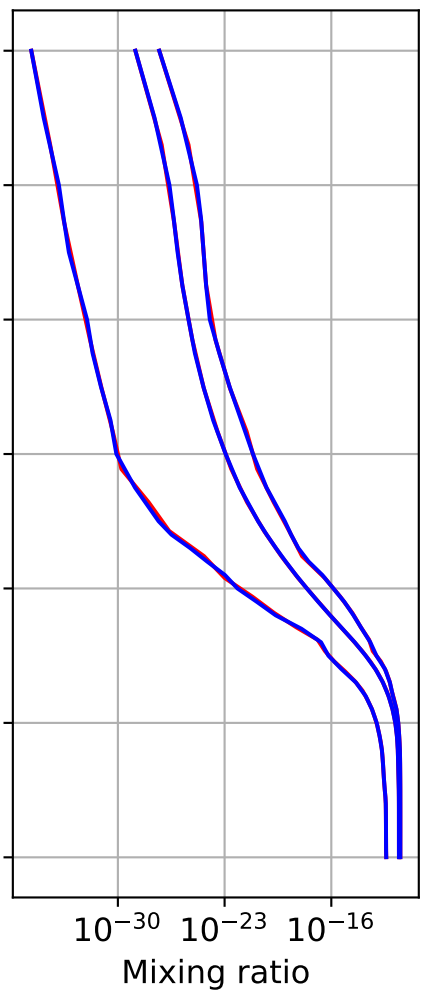
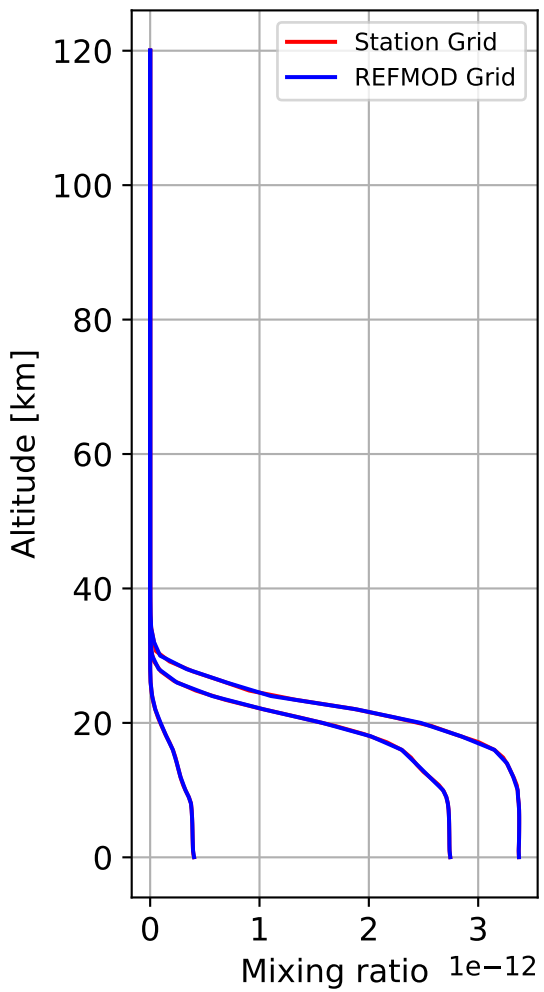
Time Series of vertical profiles (site altitude - 40 km)



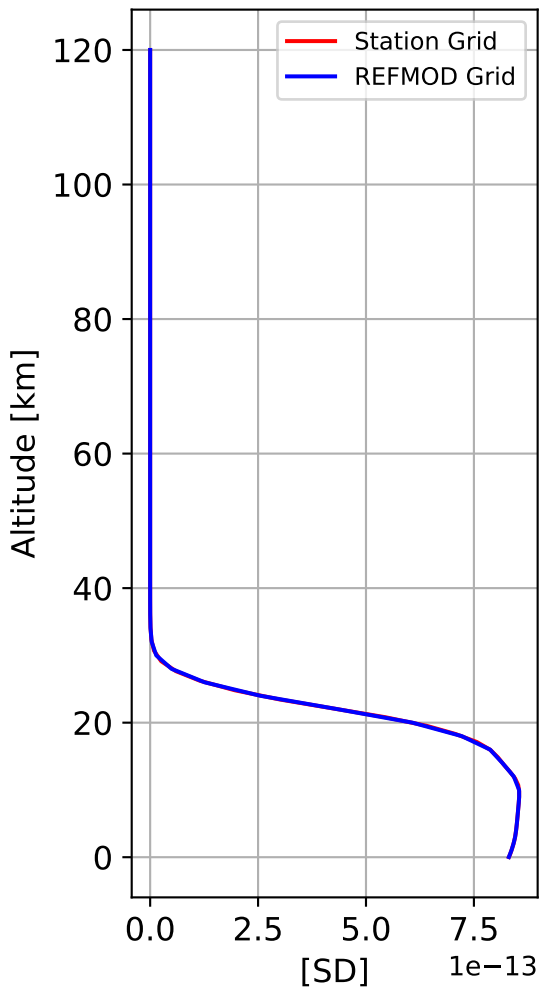
# Monthly mean WACCM profile (interpolated to station grid) Bremen, 53.1N, 8.9E, 0.027kmasl



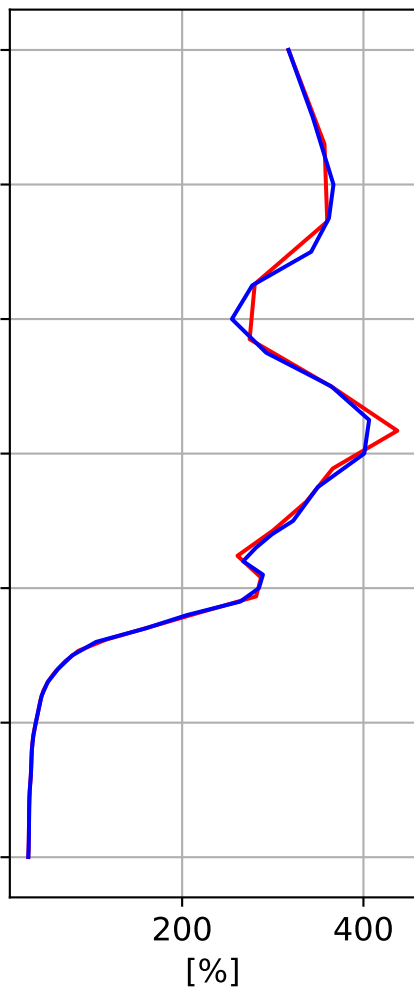
# Min, Max, Mean of 732 profiles Bremen, 53.1N, 8.9E, 0.027kmasl



### Std. Deviation



### Percent Deviation

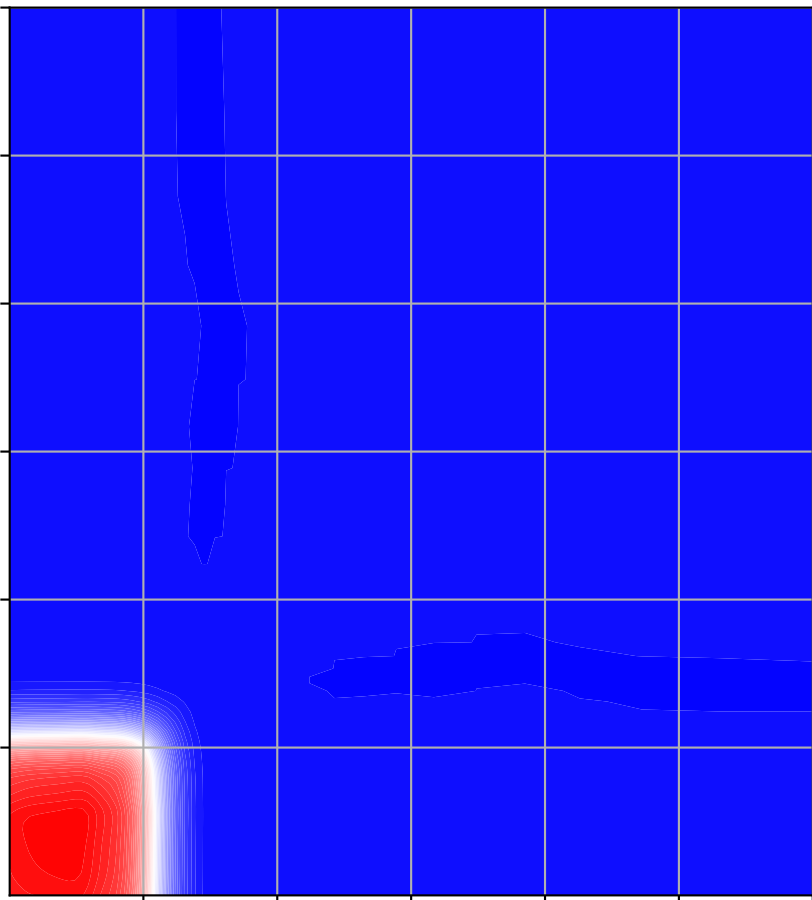


# Level covariance matrix

$1e-25$

Altitude [km]

120  
100  
80  
60  
40  
20



Altitude [km]

Mixing ratio[<sup>2</sup>]

0.0

0.9

1.8

2.7

3.6

4.5

5.4

6.3

7.2